

WE CLAIM:

1. A composition for use in cosmetics comprising naturally occurring cosmetically active material derived from eggshell membrane.
2. The composition according to claim 1, wherein said cosmetically
5 active material is in a form selected from the group consisting of mechanically processed eggshell membrane, eggshell membrane hydrolysates, eggshell membrane isolates and combinations thereof.
3. The composition according to claim 2, wherein said eggshell membrane hydrolysate or isolate is in liquid, semi-solid or solid form.
- 10 4. The composition according to claim 2, wherein said eggshell membrane hydrolysate or isolate is rich in a naturally occurring component selected from the group consisting of a hexosamine, chondroitin sulfate, hyaluronic acid, collagen, other proteins and combinations thereof.
5. The composition according to claim 4, wherein said eggshell
15 membrane hydrolysate or isolate is rich in a specific type of collagen, other proteins or combination of specific types of collagen and protein.
6. The composition according to claim 4, wherein said eggshell membrane hydrolysate or isolate comprises specific ratios of said naturally occurring components or combinations of said components.
- 20 7. The composition according to claim 6, wherein said eggshell membrane hydrolysate or isolate comprises at least about 0.2 % hyaluronic acid.
8. The composition according to claim 6, wherein said eggshell membrane hydrolysate or isolate comprises at least about 0.5 % collagen.
9. The composition according to claim 2, wherein said composition
25 comprises combinations of different isolates, combinations of different eggshell membrane powders, or a combination of an isolate and a powder.

10. The composition according to claim 1, wherein said cosmetically active material comprises naturally occurring materials found in eggshell membrane selected from the group consisting of hyaluronic acid, collagen, other proteins, hexosamine, chondroitin sulfate and combinations thereof.
- 5 11. The composition according to claim 10, wherein said hexosamine is selected from the group consisting of N-acetyl-D-glucosamine, N-acetyl-D-galactosamine, hexoses and mixtures thereof.
12. The composition according to claim 1, wherein said cosmetically active material comprises cosmetically effective amounts of a hexosamine and/or
10 chondroitin sulfate.
13. A composition for use with mammals, comprising naturally occurring material derived from eggshell membrane.
14. The composition according to claim 13, wherein said naturally occurring material is selected from the group consisting of a hexosamine, chondroitin
15 sulfate, hyaluronic acid, collagen, other proteins and combinations thereof.
15. The composition according to claim 13, wherein said composition is an ingredient in a cosmetic or therapeutic composition.
16. The composition according to claim 15, wherein said composition is an active ingredient in a cosmetic or therapeutic composition.
- 20 17. The composition according to claim 13, wherein said composition is a topically applied composition for healing wounds or an active ingredient in a topically applied composition for healing wounds.
18. The composition according to claim 13, wherein said composition further comprises at least one active ingredient derived from another source.
- 25 19. The composition according to claim 18, wherein said another source is a marine source.

20. The composition according to claim 19, wherein said active ingredient derived from another source is an isolate or an extract from tissue of an invertebrate marine animal.

21. The composition according to claim 20, wherein said active ingredient
5 derived from another source is selected from the group consisting of mussel powder, shark cartilage powder, a jellyfish extract and combinations thereof.

22. The composition according to claim 18, wherein said active ingredient derived from another source is selected from the group consisting of absorbents, anti-acne actives, anti-caking agents, anti-cellulite agents, anti-foaming agents, anti-fungal
10 actives, anti-inflammatory actives, anti-microbial actives, anti-oxidants, antiperspirant/deodorant actives, anti-skin atrophy actives, anti-viral agents, anti-wrinkle actives, artificial tanning agents and accelerators, astringents, barrier repair agents, binders, buffering agents, bulking agents, chelating agents, colorants, dyes, enzymes, essential oils, film formers, flavors, fragrances, humectants, hydrocolloids,
15 light diffusers, nail enamels, opacifying agents, optical brighteners, optical modifiers, particulates, perfumes, pH adjusters, sequestering agents, skin conditioners/moisturizers, skin feel modifiers, skin protectants, skin sensates, skin treating agents, skin exfoliating agents, skin lightening agents, skin soothing and/or healing agents, skin thickeners, sunscreen actives, topical anesthetics, vitamin
20 compounds, and combinations thereof.

23. A cosmetic composition comprising naturally occurring material derived from eggshell membrane in combination with a cosmetically acceptable carrier.

24. The cosmetic composition according to claim 23, wherein said
25 composition is intended for application to the skin or lips.

25. The cosmetic composition according to claim 23, wherein said composition is in a form selected from the group consisting of a powder, liquid, cream, lotion, gel and spray.

26. The cosmetic composition according to claim 23, wherein said naturally occurring material derived from eggshell membrane is cosmetically active.
27. The cosmetic composition according to claim 26, further comprising at least one other component selected from the group consisting of other cosmetically active ingredients, fillers, binders, lubricants, viscosity enhancing agents, fragrances, colorants, visual effect ingredients, other processing agents and combinations thereof.
28. The cosmetic composition according to claim 26, wherein said cosmetically active material comprises naturally occurring material found in eggshell membrane selected from the group consisting of hyaluronic acid, a hexosamine, chondroitin sulfate, collagen, other proteins and combinations thereof.
29. The cosmetic composition according to claim 28, wherein said cosmetically active material comprises naturally occurring material found in eggshell membrane selected from the group consisting of hyaluronic acid, a hexosamine, chondroitin sulfate and combinations thereof.
30. The cosmetic composition according to claim 29, wherein said cosmetically active material comprises at least about 0.2% hyaluronic acid.
31. The cosmetic composition according to claim 28, wherein said cosmetically active material comprises naturally occurring material found in eggshell membrane selected from the group consisting of collagen, other proteins and combinations thereof.
32. The cosmetic composition according to claim 31, wherein said cosmetically active material comprises at least about 0.5% collagen.
33. The cosmetic composition according to claim 28, wherein said cosmetically active material comprises a combination of hyaluronic acid and naturally occurring material selected from the group consisting of a hexosamine, chondroitin sulfate, collagen and other proteins, and wherein said hyaluronic acid is present in a higher percentage than the other naturally occurring material.

34. The cosmetic composition according to claim 33, wherein said hyaluronic acid is present in an amount of at least about 1% by weight based on the weight of the cosmetically active material.
35. The cosmetic composition according to claim 28, wherein said
5 cosmetically active material comprises a combination of collagen and naturally occurring material selected from the group consisting of a hexosamine, chondroitin sulfate, hyaluronic acid and other proteins, and wherein said collagen is present in a higher percentage than the other naturally occurring material.
36. The cosmetic composition according to claim 35, wherein said
10 collagen is present in an amount of at least about 5% by weight based on the weight of the cosmetically active material.
37. The cosmetic composition according to claim 23, wherein said carrier is suitable for application to skin or nails.
38. The cosmetic composition according to claim 37, wherein said carrier
15 comprises one or more compatible liquid or solid filler diluents.
39. The cosmetic composition according to claim 23, wherein said carrier is present in an amount from about 75% to about 99.999% by weight.
40. The cosmetic composition according to claim 39, wherein said carrier is present in an amount from about 85% to about 99.99% by weight.
41. The cosmetic composition according to claim 40, wherein said carrier
20 is present in an amount from about 90% to about 99% by weight.
42. The cosmetic composition according to claim 41, wherein said carrier is present in an amount from about 93% to about 98% by weight.
43. The cosmetic composition according to claim 23, wherein said
25 composition is an emulsion.

44. The cosmetic composition according to claim 43, wherein said emulsion is a type selected from the group consisting of oil-in-water, water-in-oil, water-in-oil-in-water, oil-in-water-in-oil, and oil-in-water-in-silicone.
- 5 45. The cosmetic composition according to claim 44, wherein said material derived from eggshell membrane is an eggshell membrane powder and said composition is an oil-in-water emulsion.
46. The cosmetic composition according to claim 23, wherein said composition is in a form selected from the group consisting of a cream, wax, paste, lotion, milk, mousse, gel, oil, tonic and spray.
- 10 47. The cosmetic composition according to claim 23, wherein said composition is a cosmetic product selected from the group consisting of a hand or body lotion, cold cream, facial moisturizer, anti-acne preparation, topical analgesic, foundation, eyeshadow and lipstick.
- 15 48. The cosmetic composition according to claim 23, wherein said material derived from eggshell membrane is a cosmetically active material selected from the group consisting of eggshell membrane powder, an eggshell membrane hydrolysate, an eggshell membrane isolate, and combinations thereof.
- 20 49. A cosmetic composition comprising a safe and effective amount of a cosmetically active component which comprises naturally occurring cosmetically active material derived from eggshell membrane.
50. The cosmetic composition according to claim 49, wherein said active material derived from eggshell membrane is in a form selected from the group consisting of eggshell membrane powder, an eggshell membrane hydrolysate, an eggshell membrane isolate and combinations thereof.
- 25 51. The cosmetic composition according to claim 50, wherein said eggshell membrane hydrolysate or isolate is rich in a naturally occurring material

selected from the group consisting of hyaluronic acid, a hexosamine, chondroitin sulfate, collagen, other proteins and combinations thereof.

52. The cosmetic composition according to claim 51, wherein said eggshell membrane hydrolysate or isolate is rich in a naturally occurring material
5 selected from the group consisting of hyaluronic acid, a hexosamine, chondroitin sulfate and combinations thereof.

53. The cosmetic composition according to claim 52, wherein said eggshell membrane hydrolysate or isolate is rich in hyaluronic acid.

54. The cosmetic composition according to claim 51, wherein said
10 eggshell membrane hydrolysate or isolate is rich in a naturally occurring material selected from the group consisting of collagen, other proteins and combinations thereof.

55. The cosmetic composition according to claim 54, wherein said collagen is selected from the group consisting of Type I collagen, Type V collagen,
15 Type X collagen and combinations thereof.

56. The cosmetic composition according to claim 51, wherein said eggshell membrane hydrolysate or isolate is rich in both hyaluronic acid and a naturally occurring material selected from the group consisting of a hexosamine, chondroitin sulfate, collagen and other proteins.

20 57. The cosmetic composition according to claim 51, wherein said eggshell membrane hydrolysate or isolate is rich in both collagen and a naturally occurring material selected from the group consisting of hyaluronic acid, a hexosamine, chondroitin sulfate and other proteins.

58. The cosmetic composition according to claim 50, wherein said active
25 material comprises a combination of an eggshell membrane powder and an eggshell membrane hydrolysate or isolate.

59. The cosmetic composition according to claim 50, wherein said active material comprises a combination of different eggshell membrane hydrolysates or isolates.

60. The cosmetic composition according to claim 50, wherein said
5 composition is selected from the group consisting of a cosmetic cream, a cosmetic lotion, a shampoo, a hair conditioner, a powder make-up and a colored cosmetic.

61. The cosmetic composition according to claim 49, wherein said active component is present in an amount of from about 0.01 wt % to about 50 wt % based on the weight of the cosmetic composition.

10 62. The cosmetic composition according to claim 61, wherein said active component is present in an amount of from about 0.1 wt % to about 35 wt %.

63. The cosmetic composition according to claim 62, wherein said active component is present in an amount of from about 0.5 wt % to about 25 wt %.

64. A therapeutic composition comprising a safe and effective amount of a
15 therapeutically active component which comprises naturally occurring therapeutically active material derived from eggshell membrane.

65. The therapeutic composition according to claim 64, further comprising a therapeutically acceptable carrier.

66. The therapeutic composition according to claim 65, wherein said
20 carrier is acceptable for oral or parenteral administration to a mammal.

67. The therapeutic composition according to claim 66, wherein said composition is in a form selected from the group consisting of a tablet, capsule, powder, liquid, suspension and emulsion.

68. The therapeutic composition according to claim 65, wherein said
25 carrier is acceptable for topical administration to a mammal.

69. The therapeutic composition according to claim 68, wherein said composition is in a form selected from the group consisting of a liquid, powder, creme or lotion.

70. The therapeutic composition according to claim 69, wherein said
5 composition is a topically applied liquid, creme or powder useful for wound healing.

71. The therapeutic composition according to claim 64, wherein said composition is a pharmaceutical or a nutraceutical.

72. The therapeutic composition according to claim 64, wherein said therapeutically active component further comprises a therapeutically active material
10 derived from other sources.

73. A nutraceutical composition comprising natural material derived from eggshell membrane in combination with a nutraceutically acceptable carrier.

74. The nutraceutical composition according to claim 73, wherein said material derived from eggshell membrane is therapeutically active.

15 75. The nutraceutical composition according to claim 74, wherein said composition is in a form acceptable for oral or parenteral administration to a mammal.

76. The nutraceutical composition according to claim 75, wherein said composition is in a form selected from the group consisting of a tablet, capsule, powder, liquid, suspension and emulsion.

20 77. The nutraceutical composition according to claim 74, wherein said therapeutically active material comprises naturally occurring material found in eggshell membrane selected from the group consisting of hyaluronic acid, a hexosamine, chondroitin sulfate and combinations thereof.

25 78. The nutraceutical composition according to claim 77, wherein said therapeutically active material comprises at least about 0.2% hyaluronic acid.

79. The nutraceutical composition according to claim 77, wherein said therapeutically active material comprises at least about 2% hexosamine.

80. The nutraceutical composition according to claim 79, wherein said hexosamine is selected from the group consisting of glucosamine, N-acetyl-D-
5 glucosamine, glucosamine hydrochloride, glucosamine sulfate and mixtures thereof.

81. The nutraceutical composition according to claim 77, wherein said therapeutically active material comprises at least about 0.5% chondroitin sulfate.

82. The nutraceutical composition according to claim 74, wherein said composition further comprises therapeutically active material derived from other
10 sources.

83. The nutraceutical composition according to claim 82, wherein said therapeutically active material derived from other sources is material derived from a marine source.

84. The nutraceutical composition according to claim 83, wherein said
15 material derived from a marine source is an isolate or an extract from tissue of an invertebrate marine animal.

85. The nutraceutical composition according to claim 84, wherein said isolate or extract from tissue of an invertebrate marine animal is selected from the group consisting of an isolate or extract from a mussel, an isolate or extract from
20 shark cartilage, an isolate or extract from jellyfish, an isolate or extract from sea cucumber and combinations thereof.

86. The nutraceutical composition according to claim 85, wherein said nutraceutical composition comprises about 50 wt% to about 95 wt% of natural material derived from eggshell membrane and about 5 wt% to about 50 wt% of an
25 isolate or extract from tissue of an invertebrate marine animal, based on the total weight of the composition.

87. The nutraceutical composition according to claim 86, wherein said natural material derived from eggshell membrane comprises the following:

hyaluronic acid – about 1 to about 5 wt%;

hexosamine – about 2 to about 5 wt%; and

5 chondroitin sulfate – about 0.3 to about 3 wt%.

88. The nutraceutical composition according to claim 87, wherein said isolate or extract from tissue of an invertebrate marine animal is a jellyfish isolate or extract.

89. The nutraceutical composition according to claim 74, wherein said
10 material derived from eggshell membrane is a therapeutically active material selected from the group consisting of eggshell membrane powder, an eggshell membrane hydrolysate, an eggshell membrane isolate, and combinations thereof.

90. A nutraceutical composition comprising a safe and effective amount of a therapeutically active component which comprises naturally occurring
15 therapeutically active material derived from eggshell membrane.

91. The nutraceutical composition according to claim 90, wherein said active material derived from eggshell membrane is in a form selected from the group consisting of eggshell membrane powder, an eggshell membrane hydrolysate, an eggshell membrane isolate and combinations thereof.

20 92. The nutraceutical composition according to claim 91, wherein said eggshell membrane hydrolysate or isolate is rich in a naturally occurring material selected from the group consisting of hyaluronic acid, a hexosamine, chondroitin sulfate and combinations thereof.

93. The nutraceutical composition according to claim 92, wherein said
25 eggshell membrane hydrolysate or isolate is rich in hyaluronic acid.

94. The nutraceutical composition according to claim 92, wherein said eggshell membrane hydrolysate or isolate is rich in both hyaluronic acid and a naturally occurring material selected from the group consisting of a hexosamine and chondroitin sulfate.
- 5 95. The cosmetic composition according to claim 91, wherein said active material comprises a combination of an eggshell membrane powder and an eggshell membrane hydrolysate or isolate.
96. The nutraceutical composition according to claim 91, wherein said active material comprises a combination of different eggshell membrane hydrolysates or isolates.
- 10 97. The nutraceutical composition according to claim 90, wherein said active component is present in an amount of from about 50 wt % to about 100 wt % based on the weight of the nutraceutical composition.
98. The cosmetic composition according to claim 97, wherein said active component is present in an amount of from about 70 wt % to about 100 wt %.
- 15 99. The nutraceutical composition according to claim 98, wherein said active component is present in an amount of from about 80 wt % to about 100 wt %.
100. A method for treating, conditioning or improving the appearance of skin, comprising applying to a selected area of skin a composition which comprises a naturally occurring ingredient derived from eggshell membrane.
- 20 101. The method according to claim 100, wherein said ingredient is selected from the group consisting of cosmetically active ingredients and therapeutically active ingredients.
102. The method according to claim 101, wherein said composition comprises a naturally occurring cosmetically active ingredient derived from eggshell membrane in combination with a cosmetically acceptable carrier.
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103. The method according to claim 101, wherein said composition comprises a naturally occurring therapeutically active ingredient derived from eggshell membrane in combination with a therapeutically acceptable carrier.

5 104. A method for improving the appearance of wrinkled, lined, dry, flaky, aged or photodamaged skin comprising applying to an affected area of skin a cosmetic composition which comprises a naturally occurring cosmetically active ingredient derived from eggshell membrane, in a amount sufficient to improve the appearance of the affected area of the skin.

10 105. A method for improving skin thickness, elasticity, flexibility and plumpness, the method comprising applying to the skin a cosmetic composition which comprises a naturally occurring cosmetically active ingredient derived from eggshell membrane, in an amount sufficient to improve the thickness, elasticity, flexibility and plumpness of skin.

15 106. A method of moisturizing and improving the appearance of skin comprising applying to the skin a cosmetic composition which comprises a naturally occurring cosmetically active ingredient derived from eggshell membrane, in an amount sufficient to moisture and improve the appearance of skin.

20 107. A method for treating a mammal having a condition that will benefit from the administration of a natural material found in eggshell membrane, said method comprising administering to said mammal a composition comprising a naturally occurring therapeutically active material derived from eggshell membrane.

108. The method according to claim 107, wherein said condition is a wound.

25 109. The method according to claim 108, wherein said administering step comprises topically applying said composition to said wound, in an amount sufficient to promote wound healing.

110. The method according to claim 109, wherein said wound is a type of wound selected from the group consisting of full or partially thickness tissue wounds, pressure ulcers, venous ulcers, diabetic ulcers, burns and wounds related to donor sites.
- 5 111. The method according to claim 109, wherein said wound is a skin wound selected from the group consisting of photodamaged skin, skin keratoses, skin distensae and traumatic skin wounds.
112. The method according to claim 109, wherein said naturally occurring material is selected from the group consisting of a hexosamine, chonroitin, hyaluronic
10 acid, collagen and combinations thereof.
113. The method according to claim 112, wherein said naturally occurring material comprises a combination of a hexosamine, chonroitin, hyaluronic acid and collagen.
114. The method according to claim 113, wherein said naturally occurring
15 material comprises the following in weight percent:
- hexosamine – about 2 to about 5 wt%;
- chonroitin - about 0.3 to about 3 wt%;
- hyaluronic acid - about 1 to about 5 wt%; and
- collagen - about 5 to about 20 wt%.
- 20
115. The method according to claim 107, wherein said condition is a condition having an inflammatory component.
116. The method according to claim 115, wherein said administration step comprises orally or parentally administering said composition to said mammal, in an
25 amount sufficient to treat said condition.

117. The method according to claim 116, wherein said condition having an inflammatory component is selected from the group consisting of osteoarthritis; rheumatoid arthritis; rheumatism; bursitis; degenerative spinal disc disease; a degenerative condition causing joint, tendon, ligament or soft tissue pain; and trauma to joints, tendons, ligaments or soft tissue.

118. The method according to claim 116, wherein said naturally occurring material is selected from the group consisting of a hexosamine, chondroitin and combinations thereof.

119. The method according to claim 118, wherein said hexosamine is present in an amount of about 2 to about 5 wt%, based on the total weight of the composition.

120. The method according to claim 118, wherein said chondroitin is present in an amount of about 0.3 to about 3 wt%, based on the total weight of the composition.

121. The method according to claim 116, further comprising therapeutically active material derived from another natural source.

122. The method according to claim 121, wherein said another natural source is a marine source.

123. The method according to claim 122, wherein said marine source is an invertebrate marine animal source.

124. The method according to claim 123, wherein said invertebrate marine animal source is selected from the group consisting of a mussel, shark, jellyfish and combinations thereof.